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AN APPROACH TO THE ANALYSIS OF JOINT VENTURES

by

Neil KAY, Jean-Philippe ROBE and Patrizia ZAGNOLI

BADIA FIESOLANA, SAN DOMENICO (FI)

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European University Institute
Badia Fiesolana
50016 San Domenico di Fiesole (FI)
Italy

An Approach to the Analysis of Joint Ventures.

Neil Kay, Jean-Philippe Robe and Patrizia Zagnoli.

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Neil Kay, Jean-Philippe Robe and Patrizia Zagnoli[1]

0 Introduction.

In recent years, the joint venture (JV) has emerged as a major issue in corporate governance and industrial organisation. While the organisational form itself is not a recent invention, it is its relatively recent growth in numbers and significance that has encouraged analysts and policy makers to pay closer attention to the phenomenon[2].

However, analysis in this area has encountered real difficulties, both at the theoretical and empirical level. To some extent, this reflects complexity and variety in the phenomenon itself ; JVs can adopt many forms with different degrees of parental involvement, and even definitions as to what constitutes a JV are not always consistent. Nevertheless, even after allowing for such factors, there remain analytical and conceptual difficulties in the literature that have hindered further development.

For example, it is not sufficient to explain the recent growth in JV agreements as a simple consequence of a

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1. Neil Kay is senior lecturer in the Department of Economics at Heriot-Watt University in Edinburgh; Jean-Philippe Robe is researcher in the Department of Law at European University Institute in Florence; Patrizia Zagnoli is researcher in the Department of Economics at European University Institute in Florence.

2. For instance the JV per year table developed by K. Harrigan (1986) shows the jump in the number of JVs in the U.S. between 1980 (63 JVs) and 1983 (269 JVs). While Teece (1987) affirms that collaboration is, of course, nothing new, what is new is the frequency with which collaboration is used in the development and commercialization of new products and processes.

concomitant growth in opportunities for such agreements. There are, at least in principle, always alternatives to JV organisation as far as exploitation of these opportunities is concerned. Analysis should explain why the JV in particular has emerged so strongly in certain sectors in recent years[3] compared to, say, merger or licensing alternatives.

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3. A useful source of recent data on the phenomenon is the FOR (Formazione Organizzazione Risorse) Montedison Data Base on inter-firm agreements between firms in the market economy industrialized countries. Between 1982 and 1985 531, JVs are registered with the following distribution per sector using Pavitt Taxonomy (1984):

- science based sectors	73.4%
- specialized equipment supplier	12.9%
- scale intensive	11.8%
- supplier dominated	1.3%
Total	100.0%

The heavy concentration of JVs in the science based sectors enphasizes the role of JV 's as a device for exploiting technological knowledge, either in exchange for complementary technological knowledge from partners, or for other complementary resources such as marketing and distribution (Mowery, 1986; Teece, 1986). Some sectors like commercial aircraft, robotic equipment, telecommunication equipment, etc, are characterized by the requirement for extensive investments in marketing and product support. Some others like chemicals or pharmaceuticals are characterized by technology barriers in particular fields of research that cannot be easily overcome by firms even if they are involved in complementary and/or similar products. Sometimes, in these sectors, the research path to follow in order to reach a positive commercial outcome is too long, risky and costly to be borne by a single economic entity.

A similar problem is encountered with many of the explanations of JV activity which regard the JV as a means of facilitating resource exchange, especially for economies of scale reasons or to put together complementary assets. This explanation is reasonable as far as it goes, and, in the literature, there is strong empirical support for this supposed relationship. However, it does raise other questions ; for example, why should not other objectives be pursued by JV activity ? Mergers in the post-war period frequently pursued a conglomerate strategy ; since JV is an alternative form of economic organisation to merger, why should it not also mimic merger strategies of conglomeration as well as merger strategies built around exploitation of economies ? Is it because conglomerate strategies in general are no longer fashionable, or is there something particular to the conglomerate strategy that makes it more likely to be pursued by merger than by JV ?

Another example of an issue that has proved problematical is whether JVs are more likely to contribute to efficiency through economies, or to inefficiency, by facilitating collusive behaviour and concentration of power. In principle, JVs profitability could be attributable to either source, Data limitations and the typically heterogeneous nature of JVs have made this a difficult issue to analyse, despite its obvious importance for policy makers.

In this paper, we develop an approach that we hope is useful in analysing these and other issues in this area. In the next section, we start by using a simple example to make some general hypotheses concerning JVs. Next, we argue that JVs should be analysed in a comparative institutional framework, and that this perspective may be usefully joined with the general propositions of the previous section to generate some interesting insights into the possible nature and implications of JV activity. We then set this in a historical context by relating joint venturing to the broader problem of the evolution and development of the modern corporation. We finish with an examination of existing empirical studies, dealing with the extent to which available empirical analyses are relevant to our analysis.

1 Market & Hierarchy in Joint Venture Activity

First of all we need to clarify the definition of JV underlying our considerations. JV is a form of economic activity whose stock is owned by at least two other corporations that jointly promote the creation of a separate operating entity, where each partner makes a substantial contribution in the form of capital and technology, marketing experience, personal and physical assets. For our purposes Brodley (1982) provides a working definition; "an integration of operations between two or more separate firms, in which the following conditions are present : (1) the enterprise is under the joint control of the parent firms, which are not under related control; (2) each parent makes a substancial contribution to the joint enterprise ; (3) the enterprise exists as a business entity separate from its parents ; and (4) the JC creates significant new enterprise capability in terms of new production capacity, new technology, a new product or entry into a new market."

It means that we do not consider in our definition other forms of industrial cooperation like collaborative and cooperative agreements in R&D, cross-licencing, franchising, etc., that have only contractual control since they do not create a separate entity and they involve non equity ownership[4]. Nor is financial participation sufficient to classify an activity as JV for our purposes, since JV as interpreted above requires deeper parental involvement and contribution to the resources and the decision making process of the child.

In order to establish a basis for discussion of issues and problems in this area, we shall start with a simple example of a JV and use this to develop propositions which will be useful to our subsequent analysis.

Suppose we have a technologist (T) who has invented a new product that can be produced and assembled by a

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4. Such a definition is consistent with Stuckey's (1983). Intepretation of JV as providing in the newly created entity, the capacity to pursue the goals that induced the partnership, and is similar to definitions by Harrigan (1984) and Killing (1980).
In some of the literature on the multinational enterprise, JVs are defined as all the foreign subsidiaries where the mother company own less than 100 of the equity (Dunning and Cantwell 1982). A joint subsidiary is basically a company in which the bulk of the stock is owned by two or more parent companies; thus it represents a distinct type of corporate enterprise and differs from a simple subsidiary. According to Boyle (1961) JVs and Joint subsidiaries are interchangable. More widely, JVs are defined as traditional foreign investment where there is at least one local partner (Stopford and Wells, 1972). Other authors argue that it is possible to speak of JVs only in the cases of operating JV, excluding passive financial investments made by parties not involved in the new entity's strategic business decisions (Caves, 1982; Harrigan, 1986), a position more consistent with our above interpretation.

technical group (t). We also have a marketing expert (M) who could market and distribute this product with the help of a sales/distribution team (m). For simplicity, we assume each are independent organisations, at least to start with, and that the time and resources of t and m will be fully devoted to this activity. In these circumstances, there are a variety of forms of economic organisation that may be adopted, summarized below in these main types :

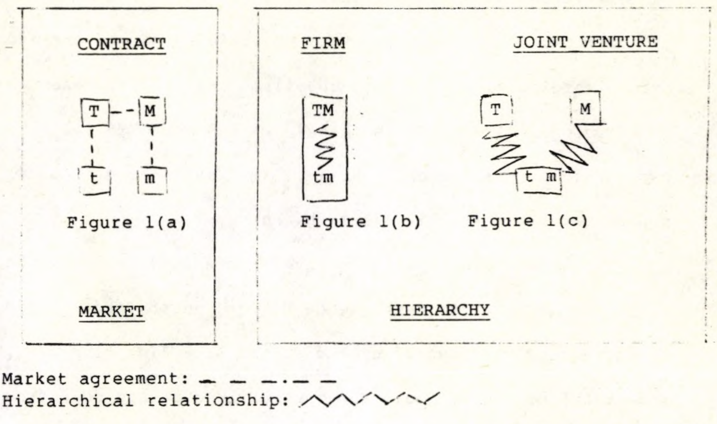

Figure 1 : Forms of Economic Organisations

The three main types of economic organisation we identify here are : contract, firm and joint venture. We classify the first as market organisation, and the latter two as hierarchical forms. The reasons for this classification will be discussed further below.

There are many possible varieties of the contractual form. For example, T might sub-contract production and assembly to t, license M to sell the product, and M might pay m to sell and distribute the product on a fee or commission basis. The different contractual arrangements preserve the organisational identity and independence of the respective units. This is illustrated in Figure 1(a).

Alternatively, co-ordination of activity may be carried out by merging all units into one firm. This is represented in Figure 1(b). In this case, we assume TM are the owners/senior management, while tm are lower level subordinates within this simple hierarchy.

The third main type illustrated above is JV - in Figure 1(c). We assume for convenience T and M enter into a 50/50 JV agreement, represented by the dotted line in figure 1, and that tm carry out the instructions passed down from their T and M superiors. The JV agreement thus creates a dual line of command as illustrated in Figure 1.

In practice, JV agreements can take many forms, and the actual agreements and hierarchical arrangements will vary from case to case.

Even if we cannot deal with all possible varieties of JVs here, but we can put forward some general propositions based on the above discussion concerning JVs that we hope have a reasonable level of generality. While accepting that there will be exceptions and qualifications, the propositions will be helpful in placing JV in the wider context of corporate and industrial development.

(1) The JV is an intermediate form of economic organisation, seen in market exchange terms. This is probably a fairly straightforward and uncontroversial point. The JV agreement will typically be more limited and less detailed compared to the network of contractual arrangements involved in the market system of Figure 1(a). However, the agreement itself means it retains some market features compared to the internalized hierarchy of the firm in Figure 1(b). In this respect, it is an intermediate form of economic organisation from the point of view of market exchange.

(2) The JV is an extreme form of economic organisation seen in hierarchical terms. As far as the extent and form of hierarchical arrangements and implied administrative costs are concerned, the JV is the most complex form of hierarchy in Figure 1. If the choice is between firm and JV in Figure 1, the JV agreement does not trade off hierarchical features for market exchange features,

rather the opposite ; the additional market exchange features have to be supported and augmented by additional hierarchical features involved in the dual command system.

(3) The JV is best analysed as complex hierarchy. This is a crucial point and is related to the first two propositions. Our analysis would suggest that it would be a mistake to interpret the JV as an intermediate, possibly transitional form, lying somewhere within some undefined spectrum between pure market exchange at one end and unified corporate organisation at the other. Its hybrid nature should not be allowed to conceal the fact that is the most complex form of economic organisation illustrated in figure 1, market exchange elements supplementing dual command complex hierarchy.

(4) The JV should be analysed in comparative institutionnal terms. It is a mistake to analyse the JV in isolation; its existence must be justified in terms of why in a given situation this form of economic organisation is adopted rather than alternative forms. Since there are usually a variety of institutionnal alternatives available for the conduct of a particular economic activity, analysis should be comparative in this respect.

For example, institutional choice in Figure 1 could be framed in opportunity cost terms. The adoption of a JV structure in this example has opportunity costs in the form of the net benefits that would have occurred had the cheapest alternative organisational form been adopted instead. A casual interpretation of Figure 1 suggests that the complexity and implicit costliness of the JV with respect to its institutional alternatives would result in it being chosen only in unusual circumstances. It is to consideration of what these circumstances might be, and their implication for the nature of JV activity, that we turn in the next section.

inference, intrusion

2 Improbability, Interference, and Joint Venture Activity

The picture painted of JV organisation in the previous section suggests that in general it is likely to be a lowly rated and hence improbable form of economic organisation. Certainly in our example above, contract and firm alternatives appear to offer simpler and clearer alternatives. This is supported by Brodley (1982) " managers typically prefer single-firm projects...and undertake joint ventures only after extensive negotiation (p.1529)", while Buckley & Casson (1987), argue that there must be some net disadvantage to merger that JV avoids. Our discussion above provide an analytical framework that helps justify such statements.

We propose that analysis of JV activity would be facilitated by following a two stage argument : Stage 1 should consider why hierarchy rather than market exchange may be preferable in certain circumstances. There has been a great deal of theoretical and empirical work in this area in

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recent years, providing both analytical tools and evidence

preuve témoignage signe

of actual behaviohr. Stage 2 should analyse why, when a hierarchical alternative may be preferred, the JV alternative is chosen. It is this stage that we shall be mostly concerned with for the remainder of the paper. We

le reste de cette étude

shall pursue the line that there must be some barriers to internalisation within a single firm as in 1(b) in Fig.1.

In general, our argument derives from conceptions of interference regarding the effective functioning of institutional forms. In Stage 1, transaction costs may impede the operation of market exchange agreement, encouraging the adoption of a hierarchical alternative. In Stage 2, there exist barriers to adoption of single firm internalisation strategies that result in the JV strategy being pursued. Thus, for analytical convenience, we presume firms's choice of institutional form follow a lexicographic pattern, with JV, the least prefered option, only being empêcher

adopted if significant barriers impede the operation of simpler market and organisational forms as in 1(a) and 1(b) in Fig.1. Analysing the decision process in this fashion allows us to concentrate on stage 2 choices ; we believe this is the relevant area for analysis of JVs, Stage 1 analysis being relatively well developed already. Consequently, below we suggest a number of Stage 2 problems that may encourage JV activity following from our analysis.

2.1 Stage 2 Barriers Facilitating Joint Venture Activity

We shall presume that Stage 1 interference problems have encouraged adoption of a hierarchical alternative. There are a number of barriers to single firm internalisation that may in turn encourage Stage 2 JV selection.

(1) Forced partnership. The most direct barrier to 1(b) type of single firm internalisation is government resistance to multinational expansion, especially in third world countries. Host governments may resist 100% foreign

ownership of local ventures and may require an overseas firm to take a local partner in a JV instead[5].

chercher

(2) Concentration. Concentrated markets may force firms to seek JV partners, especially if further merger or internal growth to exploit particular venture opportunities runs the risk of attracting the attention of the anti-trust authorities. Even here, anti-trust policy may influence the type of JV being pursued. For example, U.S. antitrust statutes present barriers to domestic firms combining their assets and activities not only in the form of merger but also as domestic JVs in order, for instance, to combine their research talents. Consequently, antitrust policy has been cited as a

plus grande ou nouvelle

biens avoirs capitaux

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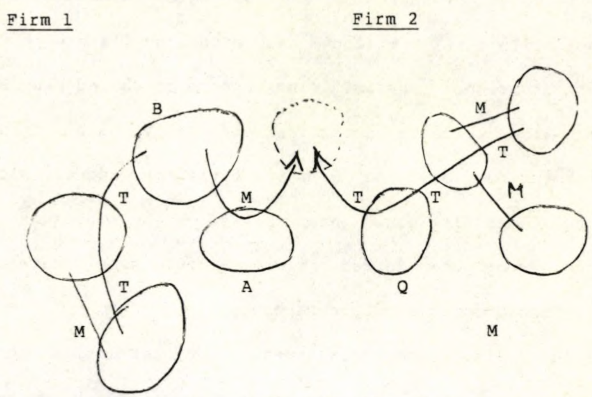
5. The strict political control of some countries in Latin America, Africa and Asia on foreign investment obliges the industries that want to invest there to enter into a partnership with a local company. In some countries like Morocco and Senegal, for instance, to benefit from fiscal and financial advantages the foreign investor has to start a business with a local partner firm. In Saudi Arabia one of the major markets of the Middle East, it is necessary to activate a local "key" to enter: e.g. the JV 40/60% between Cit-Alcatel, the French telecommunications company, with Beta Company, a public Saudi Arabian company in order to sell and install the public and private telephone network. Recently, important potential markets in the communist world, including China and U.S.S.R., have opened up to foreign investment through to JVs between domestic and foreign companies.

exacerbates these problems even further. Figure 2 illustrates probable difficulties.



M= Market link.

T= Technology link.

Figure 2 : Diversification Strategies

Figure 2 illustrates two diversified firms both having five divisions (the circles) with partial market and technology links between them[7]. For example, division A of the first firm has a market link with division B, possibly in the form of shared advertising, sales and distribution networks. In turn, division B has technology links with two other divisions, possibly in the form of shared R&D. Both firms also perceive potential efficiency gains through collaboration. Division B of the first firm and division Q of the second firm could help create a new business as indicated by the dotted circle. A could supply marketing skills and Q could supply technology.

capacité
savoir-faire
technique

The sledgehammer-craking-nut barrier to a merger solution associated with size mismatch problems holds even more strongly when both firms are highly diversified as in Figure 2 above. A merger to exploit the A/Q collaborative possibility would create a very complex and potentially cumbersome entity. Welding together such diversified systems into a coherent organisation is liable to be costly, time consuming and even impossible. The variety and complexity of linkages create administrative problems that are likely to be augmented by different corporate traditions and histories. Even if the firms are diversified along roughly

mélange

encombrant
lourd
pesant

7. The technique of mapping strategy in this fashion is discussed in detail in Kay (1982).

similar lines, differences in firms' cultures and procedures can pose formidable obstacles to effective organisational integration.

Therefore, diversification poses strong barriers to exploitation of A/Q type opportunities due to problems of integrating complex systems with differentiated cultures and backgrounds. A JV solution here permits exploitation of the A/Q opportunity without damaging the integrity and coherence of the respective partners' operations, and avoiding the sledgehammer effect of a merger solution. l'effet coup de marteau

In fact, there is another consequence of diversification that may actively facilitate JV operation. the diversified firm is more likely to adopt an M-Form as opposed to a U-Form structure (Williamson 1985), and there are possible reasons why this organisational structure is more appropriate for JV activity.

Once a divisionalised M-Form structure is adopted, JV activity is easier to initiate and sustain than is the case in the functionally specialised U-Form. Divisionalisation creates natural decision units organised around product process or territory. The U-Form structure is not well designed for JVs since the appropriate functional skills for a specific venture will be scattered in different functional homes, impeding co-ordination across functional boundaries. éparpillés

By way of contrast, middle-level divisional managers in the M-Form are more likely to have relevant skills and resources directly under their control, facilitating co-ordination and control of relevant functions at product-market level. Not only do they have control of key assets, they are well placed to assess asset deficiences or weaknesses that JV partners may compensate for. Further, the logic of M-Form operation leads to the creation of an internal capital market in which quasi-autonomous divisions compete for funds with each other on a performance basis (Williamson 1975). Such internal competition may encourage individual divisional managers to seek external alliances, such as in JVs, in attempting to compete against divisional peers. égaux?

estimer évaluer

faiblesses

recherche compétition

fonctionnement performance

Therefore the decentralized operation of the M-form corporation may facilitate the pursuit of JV activity. Divisional product-market specialisation means divisional managers are likely to have the strategic overview and direct control of relevant resources necessary for JV activity, while the decoupling effect of the internal capital market and inter-division competition may facilitate and encourage independent divisional action in this area. Consequently, not only may diversification directly encourage JV activity, it may also facilitate JV activity indirectly through the creation of M-for structures to handle diversification. This is illustrated in figure 3 below:

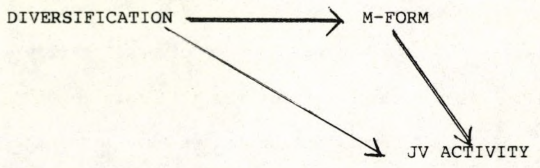


Figure 3 - Diversification, the M-Form and JV Activity.

Thus, size, diversification and the adoption of M-forms structures are each liable to be mutually reinforcing pressures leading to the formation of JV activity.

3 The Growth of Firms and the Nature of Joint Venture Activity

Our analysis of Stage 2 barriers to 1(b) type solutions results in a fairly consistent picture of corporate growth and development, and the role of the JV in this process. If we start off with an industry populated with numerous small

U-Form firms, then market exchange agreements are an obvious device for the exploitation of venture opportunities. Stage 1 transaction cost problems may create pressure for internalisation within a hierarchy, for reasons discussed earlier. Unless there are barriers to 1(b) type solutions, firms will prefer to grow by internal growth or merger. Scale, market concentration, diversification, multinationalism and M-Form structures may all result from this process of 1(b) internalisation. As we have seen, the first four of these aspects of corporate growth create barriers to further 1(b) internalisation that may result in the adoption of the least prefered option, the JV, while the last (the M-Form) actually facilitates JV formation.

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apparue

Seen in this light, the evolution and proliferation of JV activity in recent years becomes comprehensible, even inevitable. The corporation seeking venture opportunities will internalise if transaction costs pressure it to do so, but eventually internal growth and merger create larger and more complex systems that generate barriers to further pursuit of venture opportunities by this route. Growth generates its own limits. Persistent and sustained growth by the corporation will inevitably lead to it knocking against one or more of the barriers to 1(b) solutions discussed in the previous section. At some point these pressures will lead to a JV being adopted due to its being the remaining

rechercher

risque entreprise

heurter

restante

opportunity for further expansion and exploitation of venture opportunities.

Consequently, the JV is an activity that will tend to evolve naturally in the more advanced stages in a maturing industrial economy. Our interpretation of lexicographic institutional preferences is consistent with the relative absence of JV activity until relatively recently. Our analysis also suggest that the recent wave of JV activity is not a fad ; the barriers to 1(b) internalisation are structural and likely to provide continuing pressure for JV activity.

manie marotte

As well as relating the JV to the development processes of firms and industries, there are a number of specific propositions concerning the nature of JVs themselves that our analysis suggests. The five propositions below all relate to what a JV is typically not designed to do. In each case the propositions may generate testable hypotheses. After discussing each propositions we shall look at what JV activity is likely to be designed to achieve.

(1) JV activity is unlikely between firms in atomistic markets. This is because such markets are unlikely to face barriers to internal growth or merger exploitation of venture opportunities. Firms will tend to turn to JVs

as a last resort only when growth creates Stage 2 barriers of the type discussed in the previous section. At least one firm should be large, diversified and/or have a significant market share[8].

(2) JV is not for market power. Our argument suggest that JV is unlikely to be pursued for monopolistic reasons. If firms wish to collude, say in pricing, there are easier and cheaper methods. As we have seen, JV is an extremely costly and cumbersome device of last resort which is likely to be more appropriate for efficiency gains than for monopolistic control. This conflicts with the views of Adams (1985) who argues that JVs have become in recent years partial consolidations or quasi-mergers, substituting competition with co-operation.

(3) JV is not a transitional strategy. By transitional, in this context, we mean the JV is not a stepping stone to full scale merger between partners. If a merger is a possibility to start with, it would be pursued rather than the complex hierarchical alternative of JVs. It is a mistake to see the hybrid nature of the JV as implying it is intermediate between market exchange and merger. As we

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8. Though this does not preclude the possibility of monopolistic power as secondary objective.

have seen, the JV is a more complex hierarchy than is the case with unitary form alternative.

(4) <u>JVs will tend to have relatively short lives</u>. Ceteris paribus, the longer the expected life of a proposed venture between two firms, the more likely a merger is to be adopted as a solution. Using the sledgehammer/nut analogy again, the longer the life of the project, the larger the nut (venture present value), and the more likely that the sledgehammer of merger will be an appropriate solution. JVs will be more likely to be restricted to the regions of shorter expected venture lives (lower present value, and smaller nuts).

This is an interesting proposition since it suggests there is an <u>ex ante</u> selection device biasing JVs towards limited life spans, rather than limited JV life span being attributable to <u>ex post</u> failure, as in some analyses.

(5) <u>JVs do not adopt conglomerate strategies</u>. We have suggested that mergers and JVs are in principle alternatives. Much merger activity in the post-war period was for conglomerate reasons. Why should not JVs also be based on conglomerate rationale ? Our answer is based on Figure 4 below.

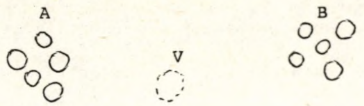

Figure 4 : Conglomerate Joint Venture

Suppose we have two conglomerates A and B. The conglomerate strategy is represented above by each of their respective divisions having no market or technological links between them. There is also a possible venture, V, indicated by the dotted circle. It has no potential market or technological links with either A or B.

We are not concerned here with why the firms wish to pursue and extend a conglomerate strategy[9]. The point is that extension of the conglomerate strategy is typically simple and straightforward with few barriers to 1(b) type internalisation since divisions operate on an individual

somewhat simple far

9. But see Williamson (1975) and Kay (1982) for analysis of possible reasons for this strategy.

profit center basis. Senior management do not have to try to integrate the mass of complex interlinkages implied in a two firm merger in Figure 2. Even if the two corporations here were to merge, there would be few cultural and organisational clashes since individual businesses would be largely separate, the major linkage at senior level being the balance sheet. Market concentration would also be unaffected by a genuine conglomerate merger. Thus, if firms, for some reason, wish to extend their conglomerate sphere of operations, 1(b) solutions are relatively straightforward and there appear no obvious reasons to turn to the device of last resort, the JV. Consequently, JV activity is unlikely to porsue a conglomerate strategy since there are typically few barriers to simpler institutional alternatives.

4 Empirical Evidence on JV Activity.

We turn now to an examination of the results obtained in previous empirical studies to consider whether or not they are consistent with our framework of analysis. The fact that different authors may give a different definitions of JV complicates the interpretation of empirical results, and reduces the significance of any isolated finding. However, what matters here is whether or not the picture constructed earlier is broadly supported, as a whole, by previous empirical works on JV.

Two areas have to be covered by our review. Firstly, we will examine evidence for the role of barriers to single firm internalization as a stimulus to JV activity. Secondly, we examine evidence relating to the hypotheses made earlier concerning the nature of JV activity.

Concerning the barriers to single firm internalization, S.V. Berg and P. Friedman, in their 1978 survey of JV in American industry confirm that if any cooperation between two firms in the same industry attracts antitrust attention, "there is evidence that horizontal JVs are viewed as safer than full horizontal mergers". Their explanation of the fact that sixty-two percent of the JVs by basic chemical firms from 1966 to 1973 where horizontal while only thirty-eight percent of the mergers were horizontal[10]. This tends to corroborate our argument that concentration will tend to encourage JV activity. In a 1976 article, J. Pfeffer

10. Berg-Friedman (1978) p.30.

and P. Nowak had contested that JV should receive a less stringent treatment than mergers from the part of antitrust authorities. Finding the proportion of horizontal parent-pairings to be positively correlated with child industry concentration, they concluded that corporate joint ventures tend to be anticompetitive instruments. It was clear for them that the numerical importance of JV in concentrated markets was a evidence of their use to secure monopoly advantages. In fact, it has been shown afterwards that it is firm size rather than concentration which determines the extent and incidence of JV activity[11], the concentration measures providing a positive correlation with JV activity only because of a link through the size of firms in an industry[12]. Also J.D. Hlavacek and V.A. Thompson had already concluded their 1976 study of the JV approach to technology utilization by stating that they are new, rational

11. Berg-Friedman (1980) p.164.

12. Berg-Friedman (1980) pp.156-157. Interstingly, although Berg and Friedman 's empirical findings concerning the size of firm effect are consistent with our expectations, their theoretical explanation for the relationship is quite different. We argue that size of firm is important because it increases barriers to the merger alternatives for exploitation of the region of common interest; Berg and Friedman argue instead that size of firm generates capital economies to fund JVs and enables the larger firm to engage in multiple JVs. We prefer to retain our explanation because it is simpler, parsimonious, and consistent with a wider range of observed phenomena.

creations, the result of objective analysis of a technical-commercial opportunity rather than adaptation to market or competitive forces[13]. If some important cases in front of the antitrust authorities have demonstrated that JV can sometimes be used in restraint of trade[14], evidence exists now that JVs are not anticompetitive instruments per se, a result consistent with what we expected given its demonstrated complexity. Their predominance in concentrated markets should not allow for an interpretation of JV as being mainly use to enhance market power, an interpretation frequently given but rejected by Berg and Frideman, after a rate-of-return analysis of JV[15].

accroître

That size is the most important single factor for JV creation is also claimed by S.E. Boyle, whose early study of JV's having at least one parent among the Fortune 500 showed that joint subsidiary participation increases as the size of firm increases. For example, firms classified among the 100 largest manufacturing corporations were identified as parent corporations in 42% of the cases, whereas the 100 smaller firms of the list appeared as parents in only 4% of the cases[16]. Also, "the larger the company, the more likely

13. Hlavacek-Thompson (1976) p.35.
14. See Brodley (1982).
15. Berg-Friedman (1979) p.18.
16. Boyle (1968) p.85.

it is to be involved in many joint subsidiaries"[17], a result which is consistent with our size argument, but also with the <u>diversification</u> one, the larger the firm, the more likely it is to be diversified. Boyle observed also that joint subsidiaries themselves tend to be small manufacturing companies, while the parents are more often the contry's largest firms[18], giving support to our size and cultural mismatch arguments. More empirical studies are needed here, especially from the point of view of separating out effects of size and diversification, and also with respect to the role of the M-Form in stimulating JV activity.

That JV are not used as <u>transitional</u>, intermediary structures preceding merger is evidenced by Berg and Friedman's study of the cases of termination of chemical JVs between 1924 and 1969[19]. In 50 cases of termination studied, only 2 were due to a parent merging into the other. In the 48 remaining cases, those which were not due to financial failure (20 cases) or an antitrust settlement (4 cases), were the result of a purchase by one parent (22 cases), by a third party (4 cases) or the result of a merger of the JV into another JV by same parents. So there seems to be a

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17. Boyle (1968) p.92.
18. Boyle (1968) p.87.
19. Berg-Friedman (1978) p.30.

tendency for JVs to be transformed into some other organizational form after a few years of operation, but not to be a step toward merger of the parents.

Simultaneously, Berg and Friedman notice the relatively short lives of JVs, but stress the fact that the absorption of the JV by one parent doesn't necessarily mean that the JV failed[20]. If JVs are not without risks[21], "some terminations reflect not the "financial failure" of the JV, but rather the advent of new areas of investment of higher potencial returns for at least one of the parents".

Finally, with regard to the inappropriatness of the use of JV in atomistic markets or for conglomerate strategy. There is little empirical evidence adressing these points directly. However, the evidence consistently points out the important role of size and complementary assets in stimulating JV activity, providing at least indirect evidence that atomistic markets and conglomerate strategy respectively do not appear to have a major impact on the formation of JVs.

Therefore, bearing in mind that the technical definitions and empirical orientation of the studies surveyed are not always entirely consistent with our own,

20. Berg-Friedman (1979) p.10.
21. Berg-Friedman (1978) p.30.

the overall emerging picture of JV activity is broadly supportive of our framework. The JV does appear to be more closely associated with concentrated markets, and while this may be more directly due to size firm effects, it does not appear to be typically for market power objectives, and does indicate its likely reduced relevance in atomistic markets where merger alternatives are still regular propositions. We also believe the size of firm effect is closely tied up with diversification and M-form effects and further research may shed some light on these inter-relationships. Indirect support for low rating of conglomerate motives in JV activity is provided by the regular citing of complementary assets as a prime motive for JV formation, but further research is needed here also as to whether or not it has been less frequent in JV then in merger activity. Further, the fundamentally temporary nature of much JV activity is consistent with our expectations, as is the tendency for it not to be a stepping stone to eventual parent merger.

5 Conclusions.

Starting from a comparative institutional perspective we have developed a simple interpretation of JV activity that has generated a rich and varied series of hypotheses.

Our framework generates a consistent and comprehensive account of JV activity by analysing the implications of JVs extremely complex and potentially costly hierarchial structure. Its role as an institutional device of last resort has been highlighted, facilitating systematic analysis of the generation and incidence of JV activity.

It has allowed JV activity to be placed in a historical context as a natural, even inevitable, phase of corporate evolution. Not only has this framework permitted us to tie together a variety of empirical findings with associated policy implications in a coherent fashion, it has also signposted current gaps and deficiences in empirical analysis of the JV. Consequently it also serves to orientate useful possible research directions concerning the nature of JV activity and associated policy implications.

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